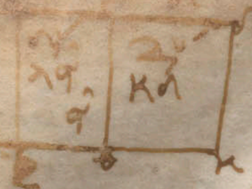
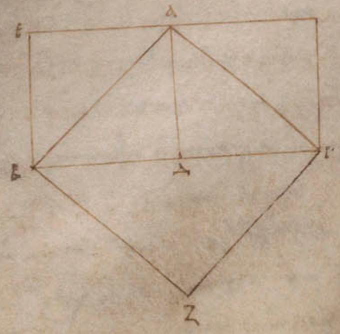


ὑπὸ ΒΑΓ. καὶ ἤχθω κάθετος ἡ ΑΔ. λέγω ὅτι τὸ μὲν ὑπὸ τῶν ΓΒΔ ἴσον ἐστὶ τῶι ἀπὸ τῆς ΒΑ. τὸ δὲ ὑπὸ τῶν ΒΓΔ ἴσον τῶι ἀπὸ ΓΑ. καὶ τὸ ὑπὸ τῶν ΒΔ, ΔΓ ἴσον τῶι ἀπὸ τῆς ΑΔ. καὶ ἔτι τὸ ὑπὸ τῶν ΒΓ, ΑΔ ἴσον τῶι ὑπὸ τῶν ΒΑ, ΑΓ. καὶ πρῶτον ὅτι τὸ ὑπὸ τῶν ΓΒΑ ἴσον τῶι ἀπὸ τῆς ΒΑ. ἐπεὶ γὰρ ἐν ὀρθογωνίωι τριγώνωι ἀπὸ τῆς ὀρθῆς γωνίας ἐπὶ τὴν βάσιν κάθετος ἦκται ἡ ΑΔ. τὰ ΑΒΔ, ΑΔΓ ἄρα τρίγωνα ὅμοιά ἐστιν τῶι τε ὅλωι τῶι ΑΒΓ καὶ ἀλλήλοις. καὶ ἐπεὶ ὅμοιόν ἐστι τὸ ΑΒΓ τρίγωνον τῶι ΑΒΔ τριγώνωι. ἔστιν ἄρα ὡς ἡ ΓΒ πρὸς τὴν ΒΑ. οὕτως ἡ ΒΑ πρὸς τὴν ΒΔ. τὸ ἄρα ὑπὸ τῶν ΓΒΔ ἴσον ἐστὶ τῶι ἀπὸ τῆς ΑΒ. διὰ τὰ αὐτὰ δὴ καὶ τὸ ὑπὸ τῶν ΒΓΔ ἴσον ἐστὶ τῶι ἀπὸ τῆς ΑΓ. καὶ ἐπεὶ ἐὰν ἐν ὀρθογωνίωι ἀπὸ τῆς ὀρθῆς γωνίας ἐπὶ τὴν βάσιν κάθετος ἀχθῆι. ἡ ἀχθεῖσα τῶν τῆς βάσεως τμημάτων μέση ἀνάλογόν ἐστιν· ἔστιν ἄρα ὡς ἡ ΒΔ πρὸς τὴν ΔΑ. οὕτως ἡ ΑΔ πρὸς τὴν ΔΓ. τὸ ἄρα ὑπὸ τῶν ΒΔ, ΔΓ ἴσον ἐστὶ τῶι ἀπὸ τῆς ΔΑ. λέγω ὅτι καὶ τὸ ὑπὸ τῶν ΒΓ, ΑΔ ἴσον ἐστὶ τῶι ὑπὸ τῶν ΒΑ, ΑΓ. ἐπεὶ γὰρ ὡς ἔφαμεν ὅμοιόν ἐστι τὸ ΑΒΓ τῶι ΑΓΔ. ἔστιν ἄρα ὡς ἡ ΒΓ πρὸς τὴν ΓΑ. οὕτως ἡ ΒΑ πρὸς τὴν ΑΔ. ἐὰν δὲ τέσσαρες εὐθεῖαι ἀνάλογον ὦσιν. τὸ ὑπὸ τῶν ἄκρων ἴσον ἐστὶ τῶι ὑπὸ τῶν μέσων. τὸ ἄρα ὑπὸ τῶν ΒΓ, ΑΔ ἴσον ἐστὶ τῶι ὑπὸ ΒΑ, ΑΓ. ἢ καὶ ὅτι ἐὰν ἀναγράφωμεν τὸ ΕΓ ὀρθογώνιον παραλληλόγραμμον καὶ συμπληρώσωμεν τὸ ΑΖ. ἴσον ἔσται τὸ ΕΓ τῶι ΑΖ· ἑκάτερον γὰρ αὐτῶν διπλάσιόν ἐστι τοῦ ΑΒΓ τριγώνου. καὶ ἔστι τὸ μὲν ΕΓ τὸ ὑπὸ τῶν ΒΓ, ΑΔ. τὸ δὲ ΑΖ τὸ ὑπὸ τῶν ΒΑ, ΑΓ. τὸ ἄρα ὑπὸ τῶν ΒΓ, ΑΔ ἴσον ἐστὶ τῶι ὑπὸ τῶν ΒΑ, ΑΓ :–



[illegible]

Εὑρεῖν δύο εὐθείας δυνάμει ἀσυμμέτρους ποιούσας τὸ μὲν συγκείμενον ἐκ τῶν ἀπ' αὐτῶν τετραγώνων ῥητόν· τὸ δ' ὑπ' αὐτῶν μέσον. ἐκκείσθωσαν δύο ῥηταὶ δυνάμει μόνον σύμμετροι αἱ ΑΒ, ΒΓ. ὥστε τὴν μείζονα τὴν ΑΒ τῆς ἐλάσσονος τῆς ΒΓ μεῖζον δύνασθαι τῶι ἀπὸ ἀσυμμέτρου ἑαυτῆι. καὶ τετμήσθω ἡ ΒΓ δίχα κατὰ τὸ Δ. καὶ τῶι ἀφ' ὁποτέρας τῶν ΒΔ, ΔΓ ἴσον παρὰ τὴν ΑΒ παραβεβλήσθω παραλληλόγραμμον ἐλλεῖπον εἴδει τετραγώνωι. καὶ ἔστω τὸ ὑπὸ τῶν ΑΕ, ΕΒ καὶ γεγράφθω ἐπὶ τῆς ΑΒ ἡμικύκλιον τὸ ΑΖΒ. καὶ ἤχθω τῆι ΑΒ πρὸς ὀρθὰς ἡ ΕΖ. καὶ ἐπεζεύχθωσαν αἱ ΑΖ, ΖΒ. καὶ ἐπεὶ δύο εὐθεῖαι ἄνισοί εἰσιν αἱ ΑΒ, ΒΓ. καὶ ἡ ΑΒ τῆς ΒΓ μεῖζον δύναται τῶι ἀπὸ ἀσυμμέτρου ἑαυτῆι. τῶι δὲ τετάρτωι τοῦ ἀπὸ τῆς ἐλάσσονος τῆς ΒΓ τουτέστι τῶι ἀπὸ τῆς ἡμισείας αὐτῆς παρὰ τὴν ΑΒ παραβέβληται ἐλλεῖπον εἴδει τετραγώνωι καὶ ποιεῖ τὸ ὑπὸ τῶν ΑΕΒ. ἀσύμμετρος ἄρα ἐστὶν ἡ ΑΕ τῆι ΕΒ. καὶ ἔστιν ὡς ἡ ΑΕ πρὸς ΕΒ. οὕτως τὸ ὑπὸ τῶν ΒΑ, ΑΕ πρὸς τὸ ὑπὸ τῶν ΑΒ, ΒΕ. ἴσον δὲ τὸ μὲν ὑπὸ τῶν ΒΑ, ΑΕ τῶι ἀπὸ τῆς ΑΖ. τὸ δὲ ὑπὸ τῶν ΑΒ, ΒΕ τῶι ἀπὸ τῆς ΖΒ. ἀσύμμετρον ἄρα ἐστὶ τὸ ἀπὸ τῆς ΑΖ τῶι ἀπὸ τῆς ΖΒ. αἱ ΑΖ, ΖΒ ἄρα δυνάμει εἰσὶν ἀσύμμετροι. καὶ ἐπεὶ ἡ ΑΒ ῥητή ἐστι.

ἐπεὶ οὖν ἡ ΑΕ τῇ ΕΒ ἀσύμμετρος ἐδείχθη διὰ τὸ ιη΄. ὡς δὲ ἡ ΑΕ πρὸς τὴν ΕΒ οὕτως τὸ ὑπὸ τῶν ΒΑ ΑΕ πρὸς τὸ ὑπὸ τῶν ΑΒ ΒΕ, ἐδείχθη διὰ τὸ πρῶτον τοῦ ς΄. ἀσύμμετρον ἄρα ἐστὶ τὸ ὑπὸ τῶν ΒΑ ΑΕ τῷ ὑπὸ ΑΒ ΒΕ. ἀλλὰ τὸ ὑπὸ ΒΑ ΑΕ καὶ ΑΒ ΒΕ ἴσα ἐδείχθη [illegible] τοῖς ἀπὸ ΖΑ ΖΒ. [illegible] ἀσύμμετρα:–

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